

*Notes on the Ethnology of British Columbia. By Dr. F. Boas.*

(Read before the American Philosophical Society, November 18, 1887.)

NOTE.—The Indian words are spelled according to the system used by the Bureau of Ethnology : q is the German ch in Bach ; e is the English sh.

In the following remarks I intend to give a brief summary of the results of my journey in British Columbia. The principal purpose of my researches was to study the distribution of the native tribes, their ethnological character, and their languages. I arrived in Victoria in September, 1886, and spent most of my time among the natives of the east coast of Vancouver island and of the mainland opposite ; but in the course of my journeys I came in contact with several individuals of the Tlingit, Tsimpshian, and Bilqula tribes, and I studied particularly the language of the last, of which I had obtained a slight knowledge from a number of men who were brought by Captain A. Jacobsen to Berlin. Among the linguistic results of my journey the most interesting are the discovery of three unknown dialects of the Salish stock and the establishment of the fact that the Bilqula, who are of Salish lineage, must have lived at one time with other Salish tribes near the sea.

Though the culture of these tribes seems very uniform, closer inquiry shows that they may be divided into four groups—the northern one comprising the Tlingit, Haida, and Tsimpshian ; the central comprising the Kwakiutl and Bilqula ; the southern comprising the different tribes of the Coast Salish ; and the tribes of the west coast of Vancouver island. All these tribes are divided into gentes ; but, while among the northern tribes, the child belongs to the gens of the mother, among the southern ones it belongs to that of the father. The arts, industries, folk-lore, and other ethnological phenomena of these groups are also different, and the groups have evidently influenced one another.

I shall first show some of these differences by considering the folk-lore of a few of these tribes.

The principal legend of the Tlingit is the well-known raven myth. It is not necessary to dwell upon this myth, as it is known by the reports of many travelers. Vemianow, who lived for a long time among the Tlingit, considers the raven as their supreme deity. It appears from the myths which I collected that besides the raven the eagle is of great importance. One of the legends tells how the raven obtained the fresh water from a mighty chief called Kanuk. This Kanuk is identical with the eagle. Traces of the raven legend are found among all tribes as far south as Komoks. The Kwakiutl consider the raven the creator of the sun, moon, and stars.

The raven legend is not found among the Salish tribes ; their supreme deity is the sun, who is called by the Skqómic the great wandering chief, and a great number of myths refer to him. Among the northern tribes of this group and among the Kwakiutl the identity of the sun and the deity is not

so clear ; they call the latter Kauts'oump (that is, "our father"), or Ata ("the one above"), or Kíkamē ("the chief"). His son, Kanikila, descended from heaven to the earth, and was born again of a woman. When he was grown up, he traveled all over the world, transforming men into animals, and making friends with many chiefs. The same legend is known to the Salish and the West Vancouver tribes. The Komoks call the deity Kumsnootl (that is, "our elder brother"); the Kauticin, Qäls ; the West Vancouver tribes, Alis. He is their culture-hero. In the southern part of Vancouver island it is said that he gave men the fire. The Kwakiutl say that he created the salmon, and gave the law of the winter dance.

These two traditions—the raven legend and the legend of the sun and the son of the deity—are mixed in numerous tribes, particularly among the Kwakiutl. The Bilqula, on the other hand, have both these legends, but a third one in addition. They say that four men—Yulátimot, Masmasalániq, Matlapálitsek, Matlapéeqoek—descended from heaven after the raven had liberated the sun. Then the tradition goes on : And Yulátimot thought, "Oh, might Masmasalániq carve men out of cedar!" and Masmasalániq carved men ; and Yulátimot thought, "Oh, might Masmasalániq make a canoe!" and Masmasalániq made a canoe, etc. Yulátimot gives Masmasalániq his thoughts, and Masmasalániq accomplishes them. Thus these two spirits created men and gave them their arts. It is remarkable, however, that by some individuals Yulátimot is described as the raven himself, and he is represented in this way in masks, paintings, and carvings.

From these few remarks it will appear that the mythology of each tribe can only be understood by studying it in connection with that of his neighbors.

Certain mythological ideas, however, are common to all tribes of the north-west coast. The myth of the creation of the world is very uniform among all tribes. The northern group say that in the beginning it was dark until the Raven liberated the sun. The southern tribes say that there was a sun from the beginning, but that daylight was kept in a box by the chief of the sun, and that it was liberated by the Raven. After it had become light, the earth, trees, fire, and water were made. It is remarkable that all these were obtained from some chief who retained them for his own use. Nothing was created. Thus the earth was prepared for man, who descended in the shape of birds from heaven. When they arrived on the earth, the birds threw off their skins and became men. These became the ancestors of the gentes, and each of them received a certain tract of land when the great transformer, Kanikila, met him. Subdivisions of the gentes derive their origin from one of the descendants of these first men. It is told, that in olden times certain men descended into the sea, or went up the mountains, where they met with some kind of spirit, who gave them his emblems. Thus they became the ancestors of subgentes.

Before Kanikila's arrival, animals had the shape of men ; but even after they were transformed they were able to appear in the shape of men by taking off their blankets. The northern tribes who do not know the great transformer, say that men were transformed into animals at the time of the great flood.

All tribes consider the sky a solid vault, which can be reached in the far west. After having crawled through a hole in the sky, another land is found, with forests, mountains, ponds, and lakes, in which the Sun and many other spirits live. There is another very remarkable way of reaching this land. The man who intends to go there takes his bow and shoots one arrow into the sky ; then he shoots another one, which sticks in the lower end of the first one ; and so he goes on shooting until a chain is formed reaching from heaven to earth. I believe that this tradition belonged originally to the tribes of the Salish stock. The Okanagan myth told by Gatschet in *Globus*, 1887, Vol. 52, No. 9, belongs to this group of legends. It is told in a great number of modifications among the tribes of Vancouver island and the neighboring coast. One of the most important of these is : How the Mink, the son of the Sun, visited his father. This tradition is told by the Kwakiutl and Bilqula. Mink made a chain of arrows reaching to the sky, and climbed up. When he arrived in heaven he found his father, an old man, sitting near the fire. The father was glad to see him, and asked him to carry the sun in his stead. Mink complied with this request, and next morning his father gave him his nose ornament, the sun, and said to him, "Do not go too fast, and don't stoop down, else you will burn the earth." Mink promised to obey, and ascended slowly his path ; but when it was near noon, clouds obstructed his way. He got impatient, and wanted to see what was going on, on the earth. He began to jump and to run and stoop down ; then the earth began to burn, the rocks to crack, and the ocean to boil. When Mink's father saw that his son disobeyed his orders, he pursued him, tore him to pieces, and cast him into the ocean. There he was found by two women.

Another interesting tradition is told by the Komoks, which in some respects resembles a well-known myth of the Tlingit. In olden times the gum was a blind man. He used to go out fishing during the night, and early in the morning his wife called him back. One day, however, she slept too long, and when she came down to the shore the sun was high up in the sky. She called her husband, but before he could return he had melted. His sons wanted to revenge his death, and made a chain of arrows reaching from heaven to earth. They climbed up and killed the Sun with their arrows. Then the elder brother asked the younger one, "What do you intend to do?" He said, "I will become the moon ;" the elder one said, "And I will become the sun."

Another remarkable tradition is told by the same tribe. The son of the Sun ascended a chain of arrows into heaven, and married Tlaiq's daughter. Tlaiq tried to kill his son-in-law, but did not succeed in his attempts. The latter, in revenge, killed Tlaiq. I consider the last-mentioned tradi-

tions of great importance, as both evidently refer to the killing of the old sun and the origin of the new one.

Visits to the Sun, or to the deity which lives in heaven, are frequent in the folk-lore of all these tribes. The Kwakiutl, for instance, tell of a chief's son who ascended to heaven and married the deity's daughter. Their son was the Raven.

The fact that the same mythical beings are known to a great number of tribes shows that the folk-lore and myths of the tribes of the north-west coast have spread from one tribe to another. The raven legend seems to have belonged to the Tlingit and their neighbors, but traces of it are found far south. On the other hand, the sun legend seems to have originated with tribes of Salish lineage; but parts of this tradition are at the present time told by their northern neighbors, and faint traces are even found among the Tsimpshian and the Tlingit.

A number of spirits occur in the folk-lore of most of the tribes of North-west America. One of these is the Tsonokoa, who is evidently a mythical form of the grizzly bear. She is a woman living on high mountains, or, in some instances, in heaven. She visits the villages in order to steal fish, which she puts into a basket that she carries on her back. One tradition says that a man wounded and pursued her. At last he arrived at her house in heaven. He was called in in order to cure her, and did so by extricating the arrows, which none of her companions were able to see. In reward she gave him her daughter, the water of life, and the fire of death, and on his return he became a mighty chief. Another spirit, which is known from Komoks to Bilqula, is Komokoa, a water-spirit, the father of the seals. Many legends tell of men who visited him, or of his visits to villages where he married a woman and became the ancestor of certain gentes. The Sisiutl, a double-headed snake, is known to all tribes from Puget Sound and Cape Flattery to the northern tribes of the Kwakiutl. It is the emblem of many gentes, and its most remarkable quality is that it can assume the shape of any fish or snake.

I have to say a few words about the dances, particularly the cannibal dances, of these tribes. The legend ascribes the origin of the latter to a spirit, Baqbakualanusiaë. This being lived in the forest. Once a man came to visit him, and when the spirit was about to devour him, he made his escape, Baqbakualanusiaë pursuing him. When the spirit had almost reached him, he threw a stone behind him, which was transformed into a large mountain. The pursuer had to go all around it, but again he approached. Then he poured out a little fish-oil which he chanced to carry. It was transformed into a lake. Again the spirit approached, and now he threw down his comb, which was transformed into a forest of young trees. He reached his house, and locked the door. When the spirit arrived, he gave him a vessel filled with dog's blood, and said, "Come in. This is my son's blood. You may eat him." But when the spirit accepted the invitation, he threw him into a pit, which he filled with fire, and thus killed him. His ashes were transformed into mosquitoes.

Besides this spirit, the crane, and the so-called "Hámaa," can become the genii of the cannibals. The right to become cannibal is hereditary in certain gentes, but every individual has to acquire it by being initiated. For this purpose he goes into the woods, where he lives for three or four months. After this time, he approaches the village, whistling and singing; then the people know that he has become a cannibal (Hámats'a). The next morning they go into the woods in order to fetch him back. They sit down in a square and sing four new songs which are composed for the occasion. The first song has a slow movement, the second is in a five-part measure, while the third and fourth have a quick movement. As soon as these are sung, the new Hámats'a makes his appearance. He is surrounded by ten men, who carry rattles, and is accompanied by them to the village. All those partaking in the ceremony wear head-rings and neck-rings made of hemlock branches. Four nights the new Hámats'a dances in the house of his father. On the fourth night he suddenly leaves the house, and after a short time returns, carrying a corpse. As soon as the old cannibals see this, they rush forward and cut the corpse to pieces, which they devour. This custom is principally practiced among all tribes of Kwakiutl lineage; but it is also found among the Bilqula and Komoks, who have evidently adopted it from the Kwakintl. Similar customs prevail among the Tsimpshian. G. M. Dawson says that they have four different systems of rites of religious character, which he calls Simhalait, Mihla, Noohlem, and Hoppop. The third of these are dog-eaters, while the last are the cannibals.

According to my inquiries, this refers to the following tradition: A man went out hunting. After some time he saw a white bear, and pursued it until it disappeared in a mountain. The hunter followed him, and saw that it was transformed into a man, who led him through his house, which stood in the interior of the mountain. There he saw four groups of men, and what they were doing. The first were the Mēitla, the second were the Nootlam ("dog-eaters"), the third were the Wihalait ("the cannibals"), and the fourth were the Semhalaidet. Four days the man staid in the house. Then he returned; but when he came to his village, he found that he had staid in the mountain four years. The bear had told him to do as he had seen the men in the mountain doing. Since that time the Tsimpshian eat dogs and bite men. There are no reports that cannibal ceremonies exist among the Haida and Tlingit.

The masks which all these tribes use in their dances represent spirits or some of the heroes of their legends. Most of the winter dances are pantomimical performances of their traditions. At the great feasts other masks are used, which refer to the tradition of the gens of the man who gives the feast. The use of masks is most extensive among the northern tribes. The variety of masks of the Haida, Tlingit, Tsimpshian, and Kwakiutl, is wonderful, but the more southern tribes have only a very limited number. Among the Nanaimo their use is the privilege of certain gentes. The Lkungen of Victoria use only very few masks, which they destroy by fire as soon as a death occurs in their tribe.

Besides the dances and the use of masks, other customs are common to all tribes of the north-west coast. One of the principal of these is the use of copper-plates. These have frequently been described as being used instead of money, but this is not the case. They are manufactured from copper found on the upper Yukon, and given as presents by one tribe to another. The Indians value a copper-plate the more, the more frequently it has been given as a present. Every single plate has its name and its own house, and is fed regularly. No woman is allowed to enter its house. Almost every tribe has a tradition referring to their origin. Some say that a man who visited the moon received it from the man in the moon. Others say that a chief living far into the ocean gave it to a man who came to visit him, etc. Similar legends refer to the *Haliotis* shells which are used for ear and nose ornaments and bracelets.

The so-called Potlatch is a feast celebrated by all these tribes. A chief invites all his neighbors, sometimes to the number of a thousand and more, to his house, and presents every one with blankets, skins, and nowadays even with money. The Salish tribes have a kind of scaffold in front of their house, which is used at these festivals. The chief and two of his slaves are standing on it, and distributing the blankets among the guests. Small festivals of this kind are celebrated very frequently. An Indian who has been unsuccessful in hunting, and feels ashamed on this account or for any other reason, gives such a festival to restore his honor.

In the beginning of these feasts four songs are sung, and four different kinds of dishes are served. Then one of the guests stands up and praises the liberality of the host, who, in his turn, replies, praising the deeds of his ancestors. In this speech he frequently uses a mask representing one of his ancestors.

I mentioned above that the social institutions of the northern group and those of their southern neighbors are different; therefore their mortuary customs and marriage ceremonies are also different. The northern tribes burn the corpses of all men except medicine-men. These are buried near the shore, and the corpse of the son is always deposited on top of the corpse of his father. It seems that some of the Kwakiutl tribes used to burn their dead; but by far the greater number of tribes of this stock either hung up the dead in boxes in top of trees, the lower branches of which were removed, or deposited these boxes in burial-grounds set apart for this purpose. Chiefs are buried in a separate place. Food of all kinds is burned for the dead on the shore.

I shall describe their mourning ceremonies as illustrative of those in use of most of the coast tribes. The mourning lasts for a whole year. For four days the mourner is not allowed to move. On the last of these days all the inhabitants of the village have to take a bath. On the same day some water is warmed and dripped on the head of the mourner. For the next twelve days he is allowed to move a little, but he must not walk. Nobody is allowed to speak to him, and they believe that whosoever disobeys this command will be punished by the death of one of his relatives.

He is fed twice a day by an old woman, at low water, with salmon caught in the preceding year. At the end of the first month he deposits his clothing in the woods, and then he is allowed to sit in a corner of the house, but must not speak to the other people. A separate door is cut, as he is not allowed to use the house door. Before he leaves the house for the first time, he must approach the door three times and return without going out. Then he is allowed to leave the house. After four months he may speak to other people. After ten months his hair is cut short, and the end of the year is the end of the mourning period. After the death of a chief, his son gives a great festival, in which he takes the office and name of his father. At first, four mourning songs are sung, which have a slow movement, and then the son of the chief stands up, holding the copper-plate in his hand and saying, "Don't mourn any more. I will be chief. I take the name of my father."

The marriage ceremonies of the Kwakiutl tribes are very remarkable. The dowry of the bride consists of bracelets made of beaver toes, copper-plates, so-called "button-blankets," and the Gyiserstal. The latter is a board, the front of which is set with sea-otter teeth. It is intended to represent the human lower jaw; and the meaning is, that the bride will have to speak or be silent, as her husband may desire. Before and after the marriage, the son-in-law gives many presents to his wife's father. If the woman intends to return to her parents, her father must repay all he has received from his son-in-law. This is done frequently, in order to give an opportunity to the father-in-law to show his liberality and wealth. As soon as he has paid the husband, the latter repurchases his wife. The use of the Gyiserstal is very limited. I found it only among the Kwakiutl proper and Ninkish.

I do not intend to describe the houses, the hunting and fishing, and industries of all these tribes, neither will I attempt to discuss the character of the art products of the different groups. I have endeavored to show in my remarks that the culture of the Northwest American tribes, which to the superficial observer seems so uniform, originates from many different sources, and that only a thorough knowledge of the languages, folklore, and customs of these tribes and their neighbors will enable us to trace at least part of their obscure history.

---

*Electrolysis of Lead Solutions. Determination of Boric Acid. Dihalogen Derivatives of Salicylic Acid. Barite. By Edgar F. Smith.*

(Read before the American Philosophical Society, Nov. 18th, 1887.)

The following is a report of work prosecuted in the laboratory of Wittenberg College, Springfield, Ohio, during the past year, partly by myself and partly by students under my supervision:

*I. Electrolysis of Lead Solutions.*

Lead is one of the metals which has given analysts considerable trouble